SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PRELIMINARY DRAFT STAFF REPORT

Proposed Amended Rule 1151 - Motor Vehicle And Mobile Equipment Non-Assembly Line Coating Operations

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

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Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations - is a source specific rule that was adopted to reduce and limit Volatile Organic Compounds (VOC), toxic air contaminants, stratospheric ozone-depleting compound, and global-warming compound emissions from automotive coating operations associated with the coating of motor vehicles, mobile equipment and associated parts or components for motor vehicles and mobile equipment.

The prior amendment, December 2, 2005, effectively split Rule 1151 into two parts with two subsequent effective dates for compliance. The first part of Rule 1151, the original rule, became effective on December 2, 2005 and remained in effect through June 30, 2008. The second part of Rule 1151, identified as Appendix A to the rule, became effective on July 1, 2008 thus superseding the first part of the rule, which is now obsolete.

The proposed amendment seeks to make administrative changes to the rule by removing obsolete rule language, and making minor revisions and editorial corrections. The proposed amendment adds new definitions for Low Volume Low Pressure (LVLP) spray equipment, automotive graphic arts operations, and weld-through primer, as well as adding reference to Rule 442 – Usage of Solvents, to promote clarity and consistency. Lastly the proposed amendment adds transfer efficiency equivalency for LVLP spray equipment and an exemption for automotive graphic arts operations. This staff proposal is administrative in nature and will not affect the current VOC limits or existing work practices.

Finally, staff intends to make minor revisions to some paragraphs of the current rule language and include clarifications and editorial corrections to the rule as necessary.

The proposed administrative amendments are not expected to yield additional VOC reductions or increases.

RULE 1151 – MOTOR VEHICLE AND MOBILE EQUIPMENT NON-ASSEMBLY LINE COATING OPERATIONS

CHAPTER 1: BACKGROUND ON PROPOSED AMENDED RULE 1151

- Introduction
- Regulatory History
- Affected Facilities
- Process Description

INTRODUCTION

Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations is a source specific rule that was adopted to reduce and limit Volatile Organic Compounds (VOC), toxic air contaminants, stratospheric ozone-depleting compound, and global-warming compound emissions from automotive coating operations associated with the coating of motor vehicles, mobile equipment and associated parts and components for motor vehicles and mobile equipment.

REGULATORY HISTORY

Rule 1151 was adopted on July 8, 1988 and has been subsequently amended twelve times. The most recent amendment was on December 2, 2005 which incorporated portions of the 2003 AQMP Control Measure CTS-10 and portions of the CARB State Control Measure. The amendment included reductions in VOC limits for certain coating categories, a prohibition of possession, an exemption for Tertiary Butyl Acetate (TBAc) as a VOC for formulated coatings, except for color and clear coatings, and modified certain categories such as combining Group I and Group II vehicles, combining all primer subcategories into a general primer category, and eliminating the specialty coating category. This amendment revised Rule 1151 into a two part rule based on effective dates. The first part of Rule 1151 was effective from December 2, 2005 through June 30, 2008. The second part of Rule 1151, which was identified as "Appendix A" to the rule, became effective on July 1, 2008, thus superseding the first part of Rule 1151. The two part structure of Rule 1151 currently contains 18 pages of obsolete language immediately followed by 16 pages of currently effective rule language, Appendix A. This structure continues to cause confusion to the regulated community.

AFFECTED INDUSTRIES

Rule 1151 is applicable to any person who supplies, sells, offers for sale, manufactures, or distributes any automotive coating or associated solvent for use within the District, as well as any person who uses, applies, or solicits, the use or application of any automotive coating or associated solvent within the District. To determine how many facilities are affected by Rule 1151, staff researched two different SCAQMD databases, the Annual Emission Reporting (AER) and the Automated Equipment Inventory Systems (AEIS) databases using Standard Industrial Classification code (SIC) 7532 as the search criteria. The AER database contains 1,081 Rule 1151 facilities whereas the AEIS contains 1,079 Rule 1151 facilities. Both databases identify required air permits which are typically for paint spray booths. Table 1 - Permit And Percentage Distribution shows the distribution of these facilities in the four county areas. At a recent meeting with the California Autobody Association (CAA), representatives reported to staff that there are approximately 7,000 active body shops in California, statewide, which calculates to approximately 3,150 facilities in the southern California area. Staff believes the difference between the SCAQMD identified number of facilities and CCA's estimation is due to several factors, such as, facilities that conduct auto body repair work but do not have paint spray booths and facilities that may not be exclusively conducting auto body and paint operations such as car dealerships, fleet operators, and truck body builders.

TABLE 1 – PERMIT AND PERCENTAGE DISTRIBUTION

COUNTY	ACTIVE PERMITS AER/AEIS	PERCENTAGE
Los Angeles County	699/700	65%
Orange County	199/196	18%
Riverside County	83/83	8%
San Bernardino County	100/100	9%
AQMD Jurisdiction	1,081/1,079	100%

(The California Auto Body Association (CAA) recently quoted a total of 7,000 auto body shops statewide which calculates to 3,150 estimated auto body shops in southern California, based on population distribution).

PROCESS DESCRIPTION

Rule 1151 is applicable to all automotive and mobile equipment refinishing operations that are not a part of a motor vehicle assembly line coating operation. Rule 1151 should not be confused with Rule 1115 - Motor Vehicle Assembly Line Coating Operations which is applicable to all assembly line coating operations conducted during the manufacturing of new motor vehicles (with the exception of Rule 1132 – Further Control Of VOC Emissions From High-Emitting Spray Booth Facilities that applies to largest operations, eg. Toyota Auto Body California (TABC)).

Automotive refinishing products are used during the repair process to address damage during manufacture, transit or during the service life of the vehicle, and are also used in the restoration, color change and customization of the vehicle as well. Automotive coatings are used in automotive refinishing operations to form a film that serves to beautify, preserve, repair or protect the surface of a motor vehicle, mobile equipment or associated parts and components. Automotive refinishing can be grouped into five broad categories: auto body repair/paint shops, production auto body paint shops, new car dealer repair/paint shops, fleet operators repair/paint shops, and truck body-builders.

Automotive refinishing is typically performed on vehicles that have sustained exterior body damage by conditions such as road hazards or collision. Many damaged vehicles are repaired by a process known as spot repair or for larger afflicted areas, panel repair. Spot repairs can be as small as a door ding and larger areas that may require a complete panel replacement, such as a front fender or a door. Less common are refinishing operations that involve a complete repainting of the entire vehicle, to either renew weathered paint, complete a color change, an automotive restoration, or vehicle customization. The process for the repair work for a damaged vehicle would include the physical repair of the damaged area, such as dent removal, application of body fillers, conditioning of substrate for subsequent coatings, and the application of an undercoat followed by the topcoat(s).

Automotive refinishing coatings are typically grouped into two different classes, undercoats and topcoats. Undercoats primarily prepare the substrate for subsequent coatings. Undercoats include adhesion promoters for plastic parts, pretreatment coatings for bare metal surface etching, and primers, primer sealers, primer surfacers, and weld-through primers which are used to undercoat the surface prior to application of the topcoat. Top coats are typically applied onto prepared primed surfaces and include single-stage coatings, color and clear coat coating systems, and multi-color coatings. Uniform finish coatings are used for blending a spot repair into the surrounding areas for proper color match. Other coating types include underbody coatings which are used on the underside of the exterior body such as inner fender-well and chassis paint which is typically used on floor boards and frame rails. Bed liner coatings are used to coat the bed of pick-up trucks but have also been used as underbody coatings due to their resistance to damage.

After a motor vehicle, mobile equipment or associated parts and components have been refinished the coating will need to cure. Non-assembly line coating operations may use several methods to achieve curing including air dry, forced air dry, infrared heat lamps or a forced air heater. The assembly line coating operations use ovens that thermally cure the coating, a method that cannot be accomplished by non-assembly line coating operators due to thermal damage that such as softening and consequently damaging plastic parts such as headlights, tail lights, instrument panels and gauges, cloth or leather interior materials, and rubber parts such as weather-stripping and tires.

When the repainted motor vehicle, mobile equipment or associated parts and components have fully cured, the final stage in automotive refinishing entails, detail sanding of the new finish (in some cases), polishing the finish, and reassembly of any components that were removed from the vehicle to facilitate access to the body work. The vehicle is then cleaned, waxed and detailed in preparation for the final presentation for the customer.

RULE 1151 – MOTOR VEHICLE AND MOBILE EQUIPMENT NON-ASSEMBLY LINE COATING OPERATIONS

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 1151

- OVERVIEW: PROPOSED AMENDMENT TO RULE 1151
- REMOVE OBSOLETE RULE LANGUAGE
- PROPOSED NEW DEFINITIONS TO BE ADDED TO RULE 1151
- PROPOSED REVISIONS TO EXISTING RULE LANGUAGE

OVERVIEW: PROPOSED AMENDMENT TO RULE 1151

Proposed Amended Rule (PAR) 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations is a source specific rule that regulates the automotive coating industry through limiting various automotive coating categories to preset VOC limits and through the implementation of work practices. Staff has identified obsolete rule language in the current version of Rule 1151 and proposes to eliminate the obsolete rule language, make minor corrections and edits thus promoting clarity and consistency of the rule language. In addition, staff is also proposing new definitions for Low Volume Low Pressure (LVLP) spray equipment, automotive graphic arts operations, and weld-through primer, as well as adding reference to Rule 442 – Usage of Solvents. The proposed amendment also seeks to promote additional clarification and address current permitting and implementation practices associated with transfer efficiency equivalency. This staff proposal is administrative in nature and will not affect the current VOC limits or work practices in the rule.

The December 2, 2005 amendment effectively split Rule 1151 into two parts with two subsequent effective dates for compliance. The first part of Rule 1151, the original rule, became effective on December 2, 2005 and remained in effect through June 30, 2008. The second part of Rule 1151, identified as Appendix A, became effective on July 1, 2008 thus superseding the first part of the rule, which is now obsolete.

REMOVE OBSOLETE RULE LANGUAGE

Staff recognizes that the two part structure of the existing rule is rather cumbersome and has often been confusing to the regulated community. The current version of Rule 1151 requires familiarity with the rule structure in general and requires diligence in reading since the first part of the rule is comprised of 18 pages of rule language immediately followed by 16 more pages of Appendix A. The current format may result in the reader referring to the VOC content limits in the first part of the rule instead of the lower VOC content limits in Appendix A and this could result in potential compliance issues with selection of coatings and meeting the correct VOC content limits. Staff is proposing to delete the obsolete portion of Rule 1151 and just retain the currently applicable Appendix A.

PROPOSED NEW DEFINITIONS TO BE ADDED TO RULE 1151

The following new definitions are proposed to address graphic arts operations, transfer efficiency provisions, make reference to Rule 1171 consistent with other SCAQMD rules, and address stakeholder inquiries related to inclusion of weld-through primers as a defined primer.

"(7) AUTOMOTIVE GRAPHIC ARTS OPERATION means the application of logos, letters, numbers, or graphics to a painted surface by brush, roller or airbrush."

"(18) LOW VOLUME, LOW PRESSURE (LVLP) means spray application equipment that has a typical volume flow rate that is 45% to 65% that of HVLP spray application equipment, and is designed to atomize 100% by air pressure only and operated at less than 10 pounds per square inch, gauge, (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns."

"(26) SOLVENT CLEANING OPERATIONS is as defined in rule 1171 – solvent cleaning operations."

"(34) WELD-THROUGH PRIMER means any primer that is specifically labeled and formulated for application to a motor vehicle, or mobile equipment or associated parts and components of a motor vehicle or mobile equipment immediately prior to welding to provide corrosion resistance."

PROPOSED REVISIONS TO EXISTING RULE LANGUAGE

Additionally, staff intends to make minor revisions to the purpose and applicability sections, rule definitions, table of standards, requirements, and other sections of the current rule language and include clarifications and editorial corrections as necessary.

Subdivision (a) Purpose

Staff proposes to make minor revisions to this paragraph to improve clarity and by adding the additional text "*associated parts or components for motor vehicles and mobile equipment.*"

"*The purpose of this rule is to ~~limit~~ reduce volatile organic compound (VOC) emissions, toxic air contaminants, and stratospheric ozone-depleting ~~compound, and~~ or global-warming compound emissions from automotive coatings~~s operations associated with the coating of~~ applications on motor vehicles, ~~and~~ mobile equipment, and associated parts and components."*

Subdivision (b) Applicability

Staff proposes to make minor revisions to this paragraph to improve clarity.

"*This rule is applicable to any person who supplies, sells, offers for sale, markets, manufactures, blends, packages, repackages, possesses or distributes any automotive coating ~~or associated solvent~~ for use within the District, as well as any person who uses, applies, or solicits~~,~~ the use or application of any automotive coating or associated solvent within the District."*

Subdivision (c) Definitions

(1) ADHESION PROMOTER means ~~a~~ any automotive coating, ~~which is~~ specifically labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent automotive coatings, and on which, a subsequent automotive coating is applied.

(2) AEROSOL COATING PRODUCT means a pressurized automotive coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application.

(4) ASSOCIATED PARTS AND COMPONENTS means structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of any motor vehicles or mobile equipment that are designed to be a part of any motor vehicles or mobile equipment but which are not attached to any motor vehicles or mobile equipment at the time of coating the structure, device, piece, module, section, assembly, subassembly, or element. The Associated parts and components definition does do not include circuit boards.

(5) AUTOMOTIVE COATING means a material which is applied to a surface and forms a film in order to beautify, preserve, repair, or protect such a surface any coating or coating component used or recommended for use in motor vehicle, or mobile equipment or associated parts and components in refinishing, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive refinishing or automotive coating made by a person on the container or in product literature constitutes a recommendation for use in motor vehicle, or mobile equipment and associated parts and components refinishing.

(6) AUTOMOTIVE COATING COMPONENT means any portion of a coating, including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended by any person to distributors or end users for use in an automotive coating, or which is used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.

Staff proposes to delete the current definition of cleaning operations in paragraph (c)(9) and replace it with solvent cleaning operations as paragraph (c)(26).

(9) CLEANING OPERATIONS means the removal of loosely held uncured adhesives, inks, coatings, or contaminants, including, but not limited to, dirt, soil, or grease, from motor vehicles, mobile equipment, associated parts and components, substrates, parts, products, tools, machinery, equipment, or general work areas.

(9) CLEAR COATING means any automotive coating that contains no pigments that is specifically labeled and formulated for application over a an automotive color coating or clear coating.

(11) COLOR COATING means any automotive pigmented coating, excluding automotive adhesion promoters, primers, and multi-color coatings, that requires a subsequent automotive clear coating and which is applied over a an automotive primer or adhesion promoter. Automotive Color color coatings include metallic/iridescent color coatings.

(12) ELECTROSTATIC SPRAY APPLICATION means any method of spray application of automotive coatings where an electrostatic attraction is created between the part to be coated and the paint particles.

(17) HIGH-VOLUME, LOW-PRESSURE (HVLP) means spray application equipment that ~~permanently labeled HVLP and which is~~has a typical volume flow rate between 30 to 200 cubic feet per minute (cfm) and is designed to atomize 100% by air pressure only and operated between 0.1 and 10 pounds per square inch, gauge, (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

(19) METALLIC/IRIDESCENT COLOR COATING means any automotive coating that contains more than 0.042 pounds per gallon (5 grams per liter) of metal or iridescent particles as applied, where such particles are visible in the dried film.

(21) MOTOR VEHICLE means any self-propelled vehicle, including, but not limited to, motorcycles, passenger cars, light-duty trucks and vans, medium-duty and heavy duty vehicles as defined in Section 1900, Title 13, of the California Administrative Code. Additional examples include, but are not limited to, buses, golf carts, ~~vans, motorcycles,~~ tanks, and armored personnel carriers.

(22) MULTI-COLOR COATING means any automotive coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.

(23) PRETREATMENT COATING means any automotive coating that contains a minimum of one-half (0.5) percent acid by weight and not more than 16 percent solids by weight necessary to provide surface etching and that is specifically labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.

(24) PRIMER means any automotive coating~~, which~~ that is specifically labeled and formulated for application to a substrate to provide 1) a bond between the substrate and subsequent coats, 2) corrosion resistance, 3) a smooth substrate surface, or 4) resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented and include weld-through primers.

(25) SINGLE-STAGE COATING means any pigmented automotive coating, excluding primers and multi-color coatings, specifically labeled and formulated for application without a subsequent clear coat. Single-stage coatings include single-stage metallic/iridescent coatings.

(27) SPOT REPAIR means repair of an area on a motor vehicle, ~~piece of~~ mobile equipment, or associated parts or components of less than ~~1~~ one square foot (929 square centimeters).

(28) TEMPORARY PROTECTIVE COATING means any automotive coating ~~which is~~ specifically labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.

(29) TRANSFER EFFICIENCY means the amount of coating solids adhering to the object being coated divided by the total amount of automotive coating solids sprayed, expressed as a percentage.

(30) TRUCK BED LINER COATING means any automotive coating, excluding color, ~~-~~multi-color, and single stage coatings, specifically labeled and formulated for application to a truck bed to protect it from surface abrasion.

(31) UNDERBODY COATING means any automotive coating specifically labeled and formulated for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.

(32) UNIFORM FINISH COATING means any automotive coating specifically labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating.

The last paragraph in subdivision (c) of Rule 1151 contains rule language that is now out of date. Staff proposes to delete this obsolete language from the rule, as follows:
~~"The Executive Officer shall conduct a technical assessment on the use of TBAc as a non VOC by July 1, 2007. In conducting the technical assessment, the Executive Officer shall consider all information on TBAc including, toxicity, carcinogenic and health risk assessment studies. The Executive Office shall report to the Governing Board as to the appropriateness of maintaining TBAc as a non-VOC."~~

Subdivision (d) Requirements
Paragraph (d)(1)
"*A person shall not use, apply or solicit the application of any automotive coating to a motor vehicle, mobile equipment, or associated parts or components of a motor vehicle or mobile equipment, unless that automotive coating complies with the applicable ~~that have a~~ VOC content limit ~~in excess of the limits contained in Table A of this paragraph~~ set forth in the Table of Standards below. Compliance with the applicable VOC content limits shall be based on VOC*

content, including any VOC material added to the original automotive coating supplied by the manufacturer, less water and exempt compounds, as applied to the motor vehicle, mobile equipment or associated parts and components."

VOC Limit Compliance Table

The current version of Rule 1151 contains a table in subdivision (d) under the heading of "Table A – Coating Categories and VOC limits." This table shows obsolete VOC limits for several coating categories typically used in automotive coating operations. Staff proposes to reformat the table and show only the current VOC content limits, which became effective January 1, 2010.

TABLE 2
TABLE OF STANDARDS

VOC CONTENT LIMITS ***Grams per Liter of Coating, Less Water and Less Exempt Compounds***		
AUTOMOTIVE COATING CATEGORIES	***~~July 1, 2008~~ Current Limit***	
	g/L	*Lb/Gal*
Adhesion Promoter	*540*	*4.5*
Clear Coating	*250*	*2.1*
Color Coating	*420*	*3.5*
Multi-Color Coating	*680*	*5.7*
Pretreatment Coating	*660*	*5.5*
Primer	*250*	*2.1*
Single-Stage Coating	*340*	*2.8*
Temporary Protective Coating	*60*	*0.5*
Truck Bed Liner Coating	*310*	*2.6*
Underbody Coating	*430*	*3.6*
Uniform Finishing Coating	*540*	*4.5*
Any Other Coating Type	*250*	*2.1*

Paragraph (d)(2) – Most Restrictive VOC Limit

"*If any representation on information on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a person that indicates that the automotive coating meets the definition of or is recommended for use for more than one of the automotive coating categories listed in paragraph (d)(1), then the lowest VOC content limit shall apply*."

Paragraph (d)(3) - VOC Limits Compliance Dates

Paragraph (d)(3) contains a compliance date requirement that has expired. Staff proposes to remove the obsolete rule language and renumber the subsequent paragraphs in subdivision (d) as follows:

"Paragraph (d)(3) – Alternative Compliance"

(A) Emission Control System

"A person may comply with the provisions of paragraph (d)(1), by using an approved emission control system, consisting of collection and control devices, provided such emission control system is approved pursuant to Rule 203 – Permit to Operate, in writing, by the Executive Officer for reducing emissions of VOC. The Executive Officer shall approve such emission control system only if the VOC emissions resulting from the use of non-compliant automotive coatings will be reduced to a level equivalent to or lower than that which would have been achieved by the compliance with the terms of paragraph (d)(1). The required efficiency of an emission control system at which an equivalent or greater level of VOC emission reduction will be achieved shall be calculated by the following equation:

$$C.E. = \left[1 - \left\{ \frac{(VOC_{LWc})}{(VOC_{LWn,Max})} \times \frac{1 - (VOC_{LWn,Max}/D_{n,Max})}{1 - (VOC_{LWc}/D_c)} \right\}\right] \times 100$$

Where:

$C.E.$ = *Control Efficiency, percent*

VOC_{LWc} = *VOC Limit of Rule 1151, less water and less exempt compounds, pursuant to paragraph (d)(1).*

$VOC_{LWn,Max}$ = *Maximum VOC content of non-compliant automotive coating used in conjunction with a control device, less water and exempt compounds.*

$D_{n,Max}$ = *Density of VOC solvent, reducer, or thinner contained in the non-compliant automotive coating containing the maximum VOC.*

D_C = *Density of corresponding VOC solvent, reducer, or thinner used in the compliant automotive coating system = 880 g/L.*

Paragraph (d)(4) – Exempt Compounds

"~~A person shall not manufacture, sell, offer for sale, distribute for use in the District, or apply any coating which contains any Group II Exempt Compounds as defined in Rule 102.~~ No person shall supply, sell, offer for sale, manufacture, blend, package, or repackage any automotive coating for use in the District subject to the provisions of this rule with any materials that contain in excess of 0.1% by weight any Group II exempt compounds listed in Rule 102. Cyclic, branched, or linear, completely methylated siloxanes (VMS) are not subject to this prohibition."

Paragraph (d)(5) – Carcinogenic Materials

"*A person shall not manufacture automotive coatings for use in the SCAQMD in which cadmium or hexavalent chromium was introduced as a pigment or as an agent to impart any property or characteristic to the automotive coatings during manufacturing, distribution, or use of the applicable automotive coatings*."

Paragraph (d)(6) – Transfer Efficiency

After several conversations with staff at both the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB), staff learned that LVLP is actually a subset of HVLP and has been in use for several years. Staff has been asked occasionally by the regulated community if LVLP spray equipment is considered compliant with the transfer efficiency requirements in the rule and if it meets the definition for HVLP. Staff will add a new definition for LVLP to clarify that LVLP is a compliant method for transfer efficiency.

(A) A person shall not apply automotive coatings to any motor vehicle, mobile equipment or any associated parts or components to a motor vehicle or mobile equipment except as exempted by paragraph (j)(4), or by the use of one of the following methods:

(i) electrostatic application, or

(ii) high-volume, low-pressure (HVLP) spray, or

(iii) low-volume, low pressure (LVLP) spray, or

~~(iii~~iv) Any such other automotive coating application methods as ~~are~~ demonstrated, in accordance with the provisions of subparagraph (h)(1)(~~E~~F), to be capable of achieving equivalent or better transfer efficiency than the automotive coating application method listed in clause (d)(6)(A)(ii), ~~and for which~~provided written approval is obtained ~~of~~ from the Executive Officer ~~has been obtained~~ prior to use.

(B) A person shall not apply any automotive coatings~~s~~ by any of the methods listed in subparagraph (d)(6)(A) unless the automotive coating is applied with properly operating equipment, operated according to procedures recommended by the manufacturer and in compliance with applicable permit conditions, if any."

Paragraph (e)(1)

"~~No~~ For the purpose of this rule, no person that applies automotive coatings subject to this rule shall ~~posses~~ possess any automotive coating that is not in compliance with requirements of paragraph (d)(1), unless one or more of the following conditions apply:"

(A) The automotive coating is located at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(3)(A)~~,~~ and the coating meets the limits specified in permit conditions.

(B) The automotive coating is located at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(3)(B), and the automotive coating is specified in the plan.

(C) The automotive coating is located at a training center and the automotive coating is used for educational purposes, provided that the VOC emissions from automotive coatings not meeting the VOC limits of paragraph (d)(1) do not exceed twelve (12) pounds per day.

(D) "The automotive topcoat is located at prototype motor vehicle manufacturing facility and the automotive coating is supplied by an assembly-line motor vehicle manufacturer specifically for use in the refinishing of a prototype motor vehicle, provided that the VOC emissions from all automotive coatings not meeting the VOC limits of paragraph (d)(1) do not exceed twenty-one (21) pounds per day and 930 pounds in any one calendar year."

Paragraph (e)(2)

"(2) ~~No~~ For the purpose of this rule, no person shall solicit from, or require any other person to use in the District any automotive coating which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the:"

Subparagraph (e)(2)(A)

"~~applicable~~ Applicable VOC limits required by paragraph (d)(1) for the specific application unless:"

Clause (e)(2)(A)(i)

"The automotive coating is located at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(~~4~~3)(A), and the automotive coating meets the limits specified in permit conditions; or,"

Clause (e)(2)(A)(ii)

"*The automotive coating is ~~coating is~~ located at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(~~4~~3)(B), and the automotive coating is specified in the plan; or*"

Clause (e)(2)(A)(iii)

"(~~ii~~iii) ~~the~~ The automotive coating is specifically exempt pursuant to subdivision (~~i~~j) of this rule."

Subparagraph (e)(2)(A)

(2) "~~No~~ For the purpose of this rule, no person shall solicit from, or require any other person to use in the District any automotive coating which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the:

(A) Applicable VOC limits required by paragraph (d)(1) for the specific application unless:

(i) The automotive coating is located at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(3)(A), and the automotive coating meets the limits specified in permit conditions; or,

(ii) The automotive coating is located at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(3)(B), and the automotive coating is specified in the plan; or

(iii) The automotive coating is specifically exempt pursuant to subdivision (j) of this rule."

Subparagraph (e)(2)(B)

"*~~the~~The requirements of paragraphs (d)(~~5~~4) and (d)(~~6~~5).*"

Paragraph (e)(3)

"No person shall ~~offer for sale, sell,~~ supply, sell, offer for sale, market, blend, package, repackage or distribute ~~for use in the District~~ any coating for use within the District subject to the provisions in this rule which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the:"

Clause (e)(3)(A)(i)

"*The coating is located at a facility that utilizes an approved emission control device pursuant to subparagraph (d)(~~4~~3)(A), and the coating meets the limits specified in permit conditions; or,*"

Clause (e)(3)(A)(ii)

"*The coating is specifically exempt under subdivision (~~i~~j) of this rule; or,*"

Clause (e)(3)(A)(iii)

"The coating is ~~coating is~~ located at a facility that operates in compliance with an approved Alternative Emissions Control Plan pursuant to subparagraph (d)(~~4~~3)(B), and the coating is specified in the plan; and,"

Clause (e)(3)(A)(iv)

"The person that offers ~~for~~ to supply, sell, offer for sale, market, blend, package, repackage ~~sale~~ or distributes the automotive coating keeps the following records for at least five years and makes them available to the Executive Officer upon request:"

Subclause (e)(3)(A)(iv)(V)

"Documentation that the material is ~~a~~ an automotive coating;"

Subparagraph (e)(3)(B)

"~~or~~ Or does not meet the requirements of paragraphs (d)(~~5~~4) and (d)(~~6~~5)."

Paragraph (e)(4)

"*~~No~~ For the purpose of this rule, no person shall solicit from, require, offer for sale ~~to~~, sell ~~to~~, or distribute to any other person for use in the District any automotive coating application equipment which does not meet the requirements of subparagraph (d)(~~7~~6)(A).*"

Paragraph (e)(5)

"~~No~~ For the purpose of this rule, no person shall offer for sale, sell, supply, market, offer for sale or distribute an HVLP spray gun or a LVLP spray gun for use within the SCAQMD unless the person offering for sale, selling, marketing or distributing the HVLP spray gun or a LVLP spray gun for use within the SCAQMD provides accurate information to the spray gun recipient on the maximum inlet air pressure to the spray gun which would result in a maximum air pressure of 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns based on the manufacturer's published technical material on the design of the spray application equipment and by a demonstration of the operation of the spray application equipment using an air pressure tip gauge from the manufacturer of the gun. The information shall either be permanently marked on the gun, or provided on the company's letterhead or in the form of technical literature which clearly identifies the spray gun manufacturer, the salesperson, or the distributor."

Paragraph (e)(6)

"*~~No~~ For the purpose of this rule, the requirements of paragraphs (e)(1), (e)(2), (e)(3), (e)(4) or (e)(~~4~~5) shall apply to all written or oral agreements executed and entered into under the terms of which a automotive coating or a automotive coating application equipment shall be used at any location within the District.*"

Paragraph (f)(1) – Recordkeeping for VOC Emissions

"(1) Recordkeeping for VOC Emissions

Records of automotive coating usage shall be maintained pursuant to SCAQMD Rule 109 – Recordkeeping for Volatile Organic Compound Emissions, and shall at a minimum include the following information:

(C) Automotive coating ~~Coating~~ category and mix ratio specific to the coating;

(D) VOC actual and regulatory for the automotive coating;

(E) Documentation that the material is ~~a~~an automotive coating or solvent;

(F) Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list the VOC actual for automotive coatings and VOC regulatory for coatings of each ready-to-spray automotive coating (based on the manufacturer's stated mix ratio) and automotive coating components and VOC content of each solvent; and,

(G) Purchase records identifying the automotive coating category, name, and volume of coatings and solvents.

Subdivision (g) – Add *Automotive* to Coating Manufacturer

"(g) Administrative Requirements for Automotive Coating Manufacturers"

Paragraph (g)(1) – Compliance Statement Requirement

"For each individual automotive coating, automotive coating component, and ready to spray mixture (based on the manufacturers stated mix ratio), the manufacturer shall include the following information on a product data sheet, or an equivalent medium:

(A) The actual and regulatory VOC for automotive coatings (in grams per liter);

Paragraph (g)(2) – Labeling Requirements

(A) The manufacturer of ~~automobile~~ automotive coatings or automotive coating components shall include on all containers the applicable use category(ies), and the ~~VOC~~ actual and regulatory VOC for automotive coatings, as supplied (in grams per liter).

Subparagraph (h)(1)(A)

Add automotive to coatings: "*VOC Content of Automotive Coatings*"

Clause (h)(1)(A)(i)

"*United States Environmental Protection Agency ("~~–~~U.S. EPA"~~–~~) Reference Test Method 24, (Determination of Volatile Matter Content, Water Content, Volume Solids and Weight Solids of Surface Coatings, Code of Federal Regulations, Title 40 ~~Code of Federal Regulations,~~ Part 60, Appendix A). The exempt compounds' content shall be determined by South Coast Air Quality Management District (SCAQMD) Laboratory Test Method 303 (Determination of Exempt*

Compounds) contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual; or ~~SCAQMD Method 304 [Determination of Volatile Organic Compounds (VOC's) in various materials] contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual~~."

Subparagraph (h)(1)(B) – Exempt Perflourocarbon Compounds

Staff proposes to reformat this rule language to provide the list of classes of compounds in a semi-bullet format.

"*The following classes of compounds:*

cyclic, branched, or linear, completely fluorinated alkanes;

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,

shall be analyzed as exempt compounds for compliance with paragraph (d)(1), only at such time as manufacturers specify which individual compounds are used in the formulation of the automotive coatings and identify the test methods, which have been approved by the U.S. EPA, CARB and the ~~District~~ SCAQMD prior to such analysis, that can be used to quantify the amounts of each exempt compound."

Subparagraph (h)(1)(D) – Add *Automotive* to Pretreatment Coatings

"Subparagraph (h)(1)(D) - Acid Content in Pretreatment Automotive Coatings"

"The acid content of pretreatment automotive coatings shall be determined by ASTM Test Method D1613-06 (2012) (Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and related products."

Subparagraph (h)(1)(E) – Add *Automotive* to Coatings

"Subparagraph (h)(1)(E) - Reflectance of Anti-Glare Safety Automotive Coatings"

"The reflectance of anti-glare automotive safety coatings shall be ~~measured~~ determined by ASTM Test Method D-523-08 (Specular Gloss)."

Subparagraph (h)(1)(F) – Transfer Efficiency

"*The transfer efficiency of alternative automotive coating application methods, as defined by clause (d)(7)(A)(~~iii~~iv), shall be determined in accordance with the SCAQMD method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989," and SCAQMD "Guidelines for Demonstrating Equivalency With District Approved Transfer Efficiency Spray Gun September 26, 2002*."

Subparagraph (h)(1)(G) - Equivalent Test Methods

"Other test methods determined to be equivalent ~~after review by the staffs of the District~~by the Executive Officer, CARB, and the U.S. EPA, and approved in writing by the ~~District~~ Executive Officer may also be used ~~for methods of analysis~~."

Subparagraph (h)(2)(A) – Determination of Efficiency of Emission Control System

"*The efficiency of the collection device of an emission control system as specified in subparagraph (d)(4~~2~~3)(A) shall be determined by the methods specified in clauses (h)(2)(A)(i), (h)(2)(A)(ii), or (h)(2)(A)(iii).*"

Clause (h)(2)(A)(iii)

"*any other method approved by the ~~United States Environmental Protection Agency~~U.S. EPA, ~~the California Air Resources Board~~CARB, and the District Executive Officer.*"

Subparagraph (h)(2)(B)

"*The efficiency of the control device of an emission control system as specified in subparagraph (d)(4~~2~~3)(A) and the VOC content in the control device exhaust gases, measured and calculated as carbon, shall be determined by USEPA Test Methods 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable. U.S. EPA Test Method 18, or CARB Method 422 shall be used to determine emissions of exempt compounds.*"

Paragraph (h)(3) - Multiple Test Methods

"When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule ~~documentation~~ established by any one of the specified test methods or set of test methods shall constitute a violation of the rule."

Subdivision (i) - Rule 442 Applicability

Staff proposes to add new rule language to Rule 1151 to include usage of solvents and make Rule 1151 consistent with other Regulation XI rules. The new rule language will be under subdivision (i) which will replace the exemptions subdivision (i). The new rule language is as follows:

"Rule 442 Applicability

Any automotive coating, automotive coating operation or facility which is exempt pursuant to subdivision (j) from all or a portion of the VOC limits of subdivision (d) shall comply with the provisions of Rule 442 – Usage of Solvents."

Subdivision (j) Exemptions

Staff proposes the following editorial clarifications for the following rule language to improve clarity.

Paragraph (j)(1) – This rule shall not apply to:

"(A) Any automotive coating applied to motor vehicles or mobile equipment, or their associated parts and components, during manufacture on an assembly line that are subject to Rule 1115 – Motor Vehicle Assembly Line Coating Operations;"

(C) Any automotive aerosol coating product; and

(D) Any coating that is ~~sold,~~ supplied, sold, ~~or~~ offered for sale, marketed manufactured, blended, packaged or repackaged for use in the District in 0.5 fluid ounces or smaller containers."

Paragraph (j)(2):

"(2) The requirements of paragraph (d)(1) shall not apply to automotive coatings applied for educational purposes at automotive coating training centers, which are owned and operated by automotive coating manufacturers, provided that the VOC emissions emitted at a automotive coating training center from automotive coatings not complying with paragraph (d)(1) does not exceed twelve (12) pounds per day."

Paragraph (j)(3):

"(3) The requirements of paragraph (d)(1) shall not apply to automotive coatings supplied by an assembly-line motor vehicle manufacturer for use by a prototype motor vehicle manufacturing facility in the finishing of a prototype motor vehicle, provided that the VOC emissions at the prototype motor vehicle manufacturing facility from such topcoats does not exceed 21 pounds in a calendar day and 930 pounds in a calendar year.

Paragraph (j)(4) – Exemptions

Paragraph (i)(4) (current rule) contains a compliance date requirement for color and clear coatings that has expired. Staff proposes to remove the obsolete rule language.

Staff has received ongoing questions whether or not custom graphics such as pin-striping, murals and other special effects type painting are compliant with Rule 1151. Staff proposes to add a new definition for an automotive graphic arts operation and then exempt a graphic arts operation that meets the definition for an automotive graphic arts operation. The definition for automotive graphic arts operation is shown under new definitions and the exemption for automotive graphic arts is shown below.

"(j)(4) The requirements of subparagraph (d)(6)(A) shall not apply to automotive graphic arts operations."

RULE 1151 – MOTOR VEHICLE AND MOBILE EQUIPMENT NON-ASSEMBLY LINE COATING OPERATIONS

CHAPTER 3: IMPACT ASSESSMENT OF PROPOSED AMENDED RULE 1151

- Emission Impact Assessment
- Cost Analysis
- Incremental Cost-Effectiveness
- California Environmental Quality Act (CEQA)
- Socioeconomic Impact Assessment
- Draft Findings under California Health and Safety Code 40727
- Comparative Analysis
- Draft Conclusions and Recommendations
- Public Comments and Responses

EMISSION IMPACT ASSESSMENT

Staff does not anticipate any emissions reductions or increases since the proposed amendment does not change any VOC content limits or standards and is administrative in nature.

COST ANALYSIS

The proposed amendment to Rule 1151 is not expected to have a net cost impact since industry will be able to continue business as usual and operate their equipment subject to Proposed Amended Rule 1151 in a similar manner to the current rule.

INCREMENTAL COST-EFFECTIVENESS

Under Health and Safety Code § 40920.6, the SCAQMD is required to perform an incremental cost analysis when adopting a Best Available Retrofit Control Technology (BARCT) rule or feasible measure required by the California Clean Air Act. To perform this analysis, the SCAQMD must (1) identify one or more control options achieving the emission reduction objectives for the proposed rule, (2) determine the cost effectiveness for each option, and (3) calculate the incremental cost effectiveness for each option. To determine incremental costs, the SCAQMD must "calculate the difference in the dollar costs divided by the difference in the emission reduction potentials between each progressively more stringent potential control option as compared to the next less expensive control option." Staff reviewed the (October 20, 2005) state control measure along with other current standards throughout the state and determined that PAR 1151 represents BARCT for motor vehicle and mobile equipment non-assembly line coating operations because there are no other more stringent limits available. PAR 1151 will not result in emission reductions and therefore no incremental cost analysis is required under Health and Safety Code § 40920.6.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Pursuant to the California Environmental Quality Act (CEQA) and the SCAQMD's Certified Regulatory Program (Rule 110), the SCAQMD will prepare appropriate CEQA documentation for the proposed amendments to Rule 1151. Upon completion, the CEQA document will be released for public review and comment, and will be available at SCAQMD Headquarters, by calling the SCAQMD Public Information Center at (909) 396-2039, or by accessing SCAQMD's CEQA website at: www.aqmd.gov/ceqa.

SOCIOECONOMIC IMPACT ASSESSMENT

The proposed amendments codify existing practices at Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations that are subject to Rule 1151. As such, there will no additional costs or other socioeconomic impacts.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE 40727

The draft findings include necessity, authority, clarity, consistency, non-duplication and reference, as defined in Health and Safety Code Section §40727. The draft findings are as follows:

Necessity - The AQMD Governing Board finds and determines that Proposed Amended Rule 1151, Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, is necessary to enhance readability and provide clarity of rule language.

Authority - The AQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, and 40440.

Clarity - The AQMD Governing Board finds and determines that Proposed Amended Rule 1151 is written and displayed so that the meaning can be easily understood by persons directly affected by it.

Consistency – The AQMD Governing Board finds and determines that Rule 1151 is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or federal or state regulations.

Non-Duplication – The AQMD Governing Board has determined that Rule 1151 does not impose the same requirement as any existing state or federal regulation, and the proposed amendment is necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD.

Reference - In adopting this proposed amendment, the AQMD Governing Board references the following statutes which AQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 40001 and 40440.

COMPARATIVE ANALYSIS

California Health and Safety Code Section 40727.2 requires the comparative analysis with any federal or other AQMD rules that apply to the same equipment or source type as the proposed amendments. There are no federal requirements for these small emitting types of equipment.

DRAFT CONCLUSIONS AND RECOMMENDATIONS

Staff recommends that Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations be amended as proposed.

PUBLIC COMMENTS AND RESPONSES

Public comments and staff responses will be addressed following the Public Workshop.

REFERENCES

SCAQMD Staff Report, Proposed Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, December 2005